[FOUNDED IN 1906 AS THE AMERICAN QUARTERLY OF ROENTGENOLOGY]

The AMERICAN JOURNAL OF ROENTGENOLOGY AND RADIUM THERAPY

Editor: LAWRENCE REYNOLDS, M.D.
Assistant Editor: RUTH BIGELOW, B.S.

VOLUME 65

JANUARY TO JUNE, 1951

CHARLES C THOMAS : SPRINGFIELD, ILLINOIS
1951

610.5
A5
J86
R7

Copyright: 1951

By AMERICAN ROENTGEN RAY SOCIETY, Inc.

DNLM

Medical
direct

CONTENTS OF VOLUME 65

JANUARY, 1951. NUMBER 1

	Page
Diagnosis of Tumors of the Breast by Simple Roentgenography. Calcifications in Carcinomas. *Dr. Raúl Leborgne*	1
Chronic Poisoning Due to Excess of Vitamin A. Description of the Clinical and Roentgen Manifestations in Seven Infants and Young Children. *John Caffey, M.D.*	12
Skeletal and Periarticular Manifestations of Hypervitaminosis D. *William R. Christensen, M.D., Charles Liebman, M.D.,* and *Merrill C. Sosman, M.D.*	27
Roentgenographic Changes and Urinary Fluoride Excretion Among Workmen Engaged in the Manufacture of Inorganic Fluorides. *Edward J. Largent, B.A., Paul G. Bovard, M.D., F.A.C.R.,* and *Francis F. Heyroth, M.D., Ph.D.*	42
Shortening of the Posterior Wall of the Sella Turcica Caused by Dilatation of the Third Ventricle or Certain Suprasellar Tumors. *Bernard S. Epstein, M.D.*	49
Traumatic Diaphragmatic Hernia. *B. Noland Carter, M.D., Jerome Giuseffi, M.D.,* and *Benjamin Felson, M.D.*	56
Floating Gallbladder Stones. *Edward C. Elsey, M.D.,* and *Donald L. Jacobs*	73
The Roentgen Diagnosis of Upper Abdominal Retroperitoneal Space-occupying Lesions. *Archie Sheinmel, M.D.,* and *Edward A. Mednick, M.D.*	77
Vital Staining with the Fluorochrome Acridine Orange and Its Application to Radiobiology. I. Alpha-ray Effects. *A. T. Krebs* and *Z. S. Gierlach*	93
Recommendations of the International Commission on Radiological Units (London, 1950).	99
Gas Insulation. A New Trend in Roentgen-ray Apparatus. *M. J. Gross, M.S.*	103
Sensitometry in Roentgenology. *J. F. Roderick, R. T.*	109
Department of Technique. A New Roentgen-ray Beam Director for Precision Radiation Therapy. *Bernard Roswit, M.D.*	115
Editorials.	
Longitudinal Growth of the Human Vertebra	120
Percy Brown, 1875–1950. *George W. Holmes, M.D.*	122
Tribute to Percy Brown Written to Dr. Holmes. *Thomas R. Goethals, M.D.*	124
Society Proceedings, Correspondence and News Items	126
Book Reviews	131
Books Received	134
Abstracts of Radiological Literature	137

FEBRUARY, 1951. NUMBER 2

Bronchography in Children. *Eduardo Rivero, M.D.*	173
The Pterygo-alar Bar and Its Recognition by Roentgen Methods in Trigeminal Neuralgia. *Kehar S. Chouké, M.D.,* and *Philip J. Hodes, M.D.*	180
Azygos Lobe Revealed by Planar Roentgenography. *Abraham G. Cohen, M.D.,* and *Alfred S. Dooneief, M.D.*	183
Cysts of the Kidney. *Harold C. Ochsner, M.D.*	185
Roentgenographic Study of Soft Tissue Pathology in and about the Knee Joint. *Raymond W. Lewis, M.D.*	200
Multicentric Osteogenic Sarcoma in Paget's Disease with Cerebral Extension. *Herbert Derman, M.D., Philip Pizzolato, M.D.,* and *Joseph Ziskind, M.D.*	221
An Unusual Case of Carcinosarcoma of the Esophagus. *Norman Ende, M.D., Philip Pizzolato, M.D., Louis Raider, M.D.,* and *Joseph Ziskind, M.D.*	227
Description of an Sr^{90} Beta-ray Applicator and Its Use on the Eye. *H. L. Friedell, M.D., C. I. Thomas, M.D.,* and *J. S. Krohmer, M.S.*	232
Supraspinatus Tendinitis. A Survey of 300 Consecutive Cases Treated by Roentgen Therapy. *Oliver T. Steen, M.D.,* and *J. A. L. McCullough, M.D., M.S.*	245
Practical Physical Aspects in the Use of Radioactive Cobalt 60 as a Radium Substitute. *Isadore Meschan, M.D., Raymond R. Edwards, Ph.D.,* and *Paul J. Rosenbaum, B.S.*	255

The Effect of Variation in Dosage Rate of Roentgen Rays on Survival in Young Birds. *S. Phyllis Stearner* 265
The Effect of Over-all Time of Exposure upon Survival of Young Chicks Following Roentgen Irradiation. *S. Phyllis Stearner* and *Emily J. B. Christian* 272
Department of Technique.
Pantopaque-Gelfoam Method for the Roentgen Visualization of the Plane of Lobotomy. *Joseph F. Dorsey, M.D.*, and *Paul J. Centner, M.D.* 277
Editorials.
Dangers of Abdominal Aortography 280
Henry J. Ullmann, 1881–1950. *Lyell C. Kinney, M.D.* 282
Society Proceedings, Correspondence and News Items 284
Book Reviews 288
Books Received 291
Abstracts of Radiological Literature 293

March, 1951. Number 3

The Normal Cerebral Angiogram. *Robert W. Curry*, and *George G. Culbreth* 345
Contrast Myelography with Emulsified Pantopaque. *William A. Nosik, M.D.* 374
Intervertebral Joint Subluxation, Bony Impingement and Foramen Encroachment with Nerve Root Changes. *Lee A. Hadley, M.D.* 377
Skeletal Development in Infancy. Standards for Clinical Use. *Earle L. Reynolds, Ph.D.*, and *Toshiko Asakawa, R.N.* 403
Intravenous Nephrography: A Method of Roentgen Visualization of the Kidney. *H. Stephen Weens, M.D., Herbert M. Olnick, M.D., David F. James, M.D.*, and *James V. Warren, M.D.* 411
Treatment of Tumors of the Thyroid with Divided Doses of Radioactive Iodine. *George Crile, Jr., M.D.* 415
The Theory and Methods of the Radioautographic Localization of Radioelements in Tissues. *J. Gross, R. Bogoroch, N. J. Nadler*, and *C. P. Leblond* 420
Self-healing Epithelioma of the Skin. *Alexander A. Charteris, M.B., Ch.B., D.P.H., F.R.F.P.S.G., F.F.R.* 459
Effect of Physical and Chemical Factors on Phagocytosis in the Presence of Irradiated Human Blood and Plasma. *Jirair N. Sarian, M.D.* 465
Department of Technique.
A Radon Measuring Device. *E. K. Darby, M.Sc.*, and *H. E. Johns, Ph.D.* 472
Editorials.
Radiological Units. Comments on the Report of the International Commission on Radiological Units, Sixth International Congress of Radiology. *G. Failla, D.Sc.* 477
Gösta Forssell, 1876–1950. *A. C. Christie, M.D.* 481
Memorial Tributes to Gösta Forssell 484
Society Proceedings, Correspondence and News Items 489
Abstracts of Radiological Literature 493

April, 1951. Number 4

Evolution of Radiologic Physics as Applied to Isotopes. Janeway Lecture, 1950. *Otto Glasser, Ph.D.* 515
Traumatic Chylothorax. The Roentgen Aspects of This Problem. *Robert M. Lowman, M.D., Jack Hoogerhyde, M.D., Levin L. Waters, M.D.*, and *Constance Grant, M.D.* 529
Cooley's Erythroblastic Anemia. Some Skeletal Findings in Adolescents and Young Adults. *John Caffey, M.D.* 547
Gastrointestinal Roentgenographic Observations in Peptic Ulcer Patients Treated by Vagotomy. *Charles A. Priviteri, M.D.* 561
The Significance of Opaque Medications in the Gastrointestinal Tract, with Special Reference to Enteric Coated Pills. *C. L. Hinkel, M.D., Med. Sc.D.* 575
The Anterior Tubercle of the First Cervical Vertebra and the Hyoid Bone: Their Occurrence in Newborn Infants. *Arthur C. Tompsett, Jr., M.D.*, and *S. W. Donaldson, M.D.* 582
Multiple Myeloma Complicating Paget's Disease. *Robert J. Gross, M.D.*, and *Gabriel Yelin, M.D.* 585

Craniolacunia Diagnosed Prenatally. Review of Literature with a Case Report. *Generoso D'Aversa, M.D.*, and *Dudley H. Lonngren, M.D.* ... 590
Estimation of the Weight of the Hyperplastic Prostate from the Cystourethrogram. *Robert C. Thumann, Jr., M.D.* ... 593
Androgen Therapy in the Control of Pulmonary Metastasis from Adenocarcinoma of the Corpus Uteri. Report of a Case Benefited by Androgen Therapy. *John H. Freed, M.D., Eugene P. Pendergrass, M.D.*, and *John W. Carnwath, M.D.* ... 596
International Recommendations on Radiological Protection. Revised by the International Commission on Radiological Protection at the Sixth International Congress of Radiology (London, July, 1950) ... 603
Supplement on Maximum Permissible Amounts of Radioactive Isotopes. International Commission on Radiological Protection (July, 1950) ... 610
Department of Technique.
A Simple Manual Cassette Changer for Multiple Exposures in Angiocardiography. *Albert D. Kistin, M.D.* ... 615
Dural Venous Sinography. A Method of Visualization of the Sagittal Dural Sinus and Its Tributaries by Direct Injection of Diodrast. Preliminary Report. *Michael Scott, M.D.* 619
Editorials.
The Annual Meeting of the American Radium Society. *Hugh F. Hare, M.D.* ... 622
John B. Jackson, 1876–1950. *R. C. Hildreth, M.D.* ... 623
Society Proceedings, Correspondence and News Items ... 625
Book Reviews ... 633
Books Received ... 635
Abstracts of Radiological Literature ... 637

May, 1951. Number 5

The Triumphs of Palliation in Radiation Therapy. *Bernard Pierre Widmann, M.D.* ... 685
Growth and Spread of Cancer of the Cervix Uteri. *Gray H. Twombly, M.D.*, and *Salvatore di Palma, M.D.* ... 691
The Results of Surgical Treatment of Cancer of the Cervix Uteri. *Joe V. Meigs, M.D.* ... 698
Radiation Treatment of Cancer of the Cervix Uteri. *James F. Nolan, M.D.*, and *Lucille Du Sault, A.B.* ... 709
End Results of Radiation Treatment of Cancer of the Cervix Uteri. *Herbert E. Schmitz, M.D.* 715
The Possibilities of Radical Surgery in Cancer of the Cervix Uteri Recurrent after Radiation Therapy. *Alexander Brunschwig, M.D.* ... 720
Radiocobalt (Co^{60}) as a Therapeutic Alternative to Radium. *C. W. Wilson, M.Sc., Ph.D., F. Inst. P.* ... 726
Individualized Interstitial Irradiation of Cancer of the Uterine Cervix Using Cobalt 60 in Needles, Inserted through a Lucite Template. A Progress Report. *Joseph L. Morton, M.D., Allan C. Barnes, M.D., George W. Callendine, Jr., M.Sc.*, and *Wm. G. Myers, Ph.D., M.D.* ... 737
Involvement of the Manubriosternal Joint in Marie-Strümpell Disease. *Julius Solovay, M.D.*, and *Carol Gardner, M.D.* ... 749
Pelvic and Extrapelvic Osteopathy in Rheumatoid Spondylitis. A Clinical and Roentgenographic Study of Ninety Cases. *C. Maynard Guest, M.D.*, and *Harold G. Jacobson, M.D.* 760
Synovioma. With Special Reference to the Clinical and Roentgenologic Aspects. *DeForest E. Hale, M.D.* ... 769
Appearance of Centers of Ossification in the Human Pelvis before Birth. *Carl C. Francis, M.D.* ... 778
Growth of the Shaft of the Human Radius and Ulna during the First Two Years of Life. *Musa K. Ghantus, M.D.* ... 784
Dose Distribution Measurements with the University of Illinois 25 mev. Medical Betatron. *John S. Laughlin, Ph.D., John W. Beattie, B.S., James E. Lindsay, M.S.*, and *Roger A. Harvey, M.D.* ... 787
Department of Technique.
A Practical Compression Device for Spot Roentgenograms. *Wallace S. Tirman, M.D.*, and *Allan C. Nickel, M.D.* ... 800
Editorials.
The Two Hundredth Anniversary of the Founding of the Pennsylvania Hospital ... 804
Lawther Jackson Whitehead, 1891–1951. *Frederick B. Mandeville, M.D.* ... 807

Society Proceedings, Correspondence and News Items 809
Book Reviews 814
Books Received 818
Abstracts of Radiological Literature 820

June, 1951. Number 6

The Role of Roentgenology in Gastroenterology. Caldwell Lecture, 1950. *H. L. Bockus, M.D.* 853
Acute Appendicitis with Radiopaque Appendiceal Lithiasis. *Eugene G. Laforet, M.D., John J. Greenler, M.D.*, and *Edward J. O'Brien, Jr., M.D.* 867
Prolapse of the Lower Lip of the Ileocecal Valve into the Terminal Ileum. *Leo G. Rigler, M.D.*, and *Elliott Lasser, M.D.* 878
Porphyria. A Cause of Nonspecific Small Intestinal Disturbance. *Samuel H. Fisher, M.D.*, and *Robert R. Stanley, M.D.* 882
The Limited Usefulness of the "Positive Pressure" Chest Roentgenogram in Pulmonary Tuberculosis. *Bernard Pollak, M.D.*, and *Allan Hurst, M.D.* 886
Osteonephropathy in Children. *J. James Cancelmo, M.D.*, and *Ralph S. Bromer, M.D.* 889
Air Cells in the Great Wing of the Sphenoid Bone. *Russell Wigh, M.D.* 916
Infantile Cortical Hyperostosis: A Familial Disease? *James G. Boyes, M.D.*, and *Nicholas G. Demy, M.D.* 924
A Case of Letterer-Siwe Disease. *Charles Wadsworth Schwartz, M.D.* 931
The Dose-Time Relationship for the Cure of Squamous Cell Carcinoma. *J. Robert Andrews, M.D.*, and *Thomas O. Coppedge, M.D.* 934
Irradiated Human Plasma and Phagocytosis. *Jirair N. Sarian, M.D.* 940
Physical Aspects of Rotation Therapy with the Betatron. Part I. *J. S. Laughlin, Ph.D., R. A. Harvey, M.D., L. L. Haas, M.D., J. E. Lindsay, M.S.*, and *J. W. Beattie, B.S.* ... 947
Editorials.
The Medical Use of Radioactive Isotopes. *John H. Lawrence, M.D.* 953
Francis Carter Wood, 1869–1951. *William H. Woglom, M.D.* 955
Society Proceedings, Correspondence and News Items 960
Abstracts of Radiological Literature 964
Subject Index to Volume 65 997
Author Index to Volume 65 1019